

PART A – COVER PAGE

STATE WATER RESOURCES CONTROL BOARD
SFY 2002 Costa-Machado Water Act of 2000
CALFED Watershed Program

Application No. 419

PROJECT

TITLE: Glenn County Surface Water Stewardship

Project Region X Indicate RWQCB #: 5

Multi-regional
Project _____ Indicate RWQCB #s: _____

Statewide Project _____

PROJECT (Ms.,
DIRECTOR Mr.,
(one name only) Dr.): Mr. Ed Romano June 6, 2002
PRINT DATE

LEAD APPLICANT OR (one name only)
ORGANIZATION: Glenn County Department of Agriculture

TYPE OF AGENCY:

Municipality _____ Local Agency _____ *Nonprofit
(non-landowner) _____

Nonprofit (landowner) _____ Local Public Agency X

STREET ADDRESS: 720 N. Colusa St.

CITY: Willows Zip Code: 95988

P.O. BOX: P.O. Box 351 Zip Code: 95988

COUNTY Glenn
STATE: California

PHONE NO.: (530) 934-6501 FAX NO.: (530) 934-6503

E-MAIL agcommr@countyofgl FEDERAL
ADDRESS: enn.net TAX ID. NO.: 94-600091

PROJECT TYPE: Water Quality Monitoring/Watershed Management

LEGISLATIVE
INFORMATION

Senate District	<u>4</u>	Assembly District	<u>2</u>
United States Congressional District			<u>3</u>

CALFED, RWQCB, or SWRCB STAFF CONTACTED REGARDING THIS PROPOSAL:

Contact:	<u></u>	Contact:	<u></u>
Phone No.:	<u></u>	Phone No.:	<u></u>
Dates contacted:	<u></u>	Dates contacted:	<u></u>

PRIMARY COOPERATING ENTITIES:

Entity Name:	<u>Glenn Co. Dept. of Agric.</u>	
Role/Contribution to Project:	<u>Lead Agency</u>	
Contact Person:	<u>Rey Lopez</u>	Phone No.: <u>530-934-6501</u>
E-mail address:	<u>agcommr@countyofglenn.net</u>	

Entity Name:	<u>CSU Chico</u>	
Role/Contribution to Project:	<u>Monitoring Coordinator</u>	
Contact Person:	<u>David Brown</u>	Phone No.: <u>530-898-4035</u>
E-mail address:	<u>dlbrown@csuchico.edu</u>	

WATERBODY/WATERSHED
(Include Catalog Number in
Section 18 of the ARD): Region 5, Lower Sacramento, 18020109

GPS COORDINATES FOR
PROJECT LOCATION, IF
AVAILABLE:

FISCAL SUMMARY:

Proposition 13 Funds Requested	<u>\$275,000</u>
Other Project Funds	<u>\$ 71,500</u>
Total Project Budget	<u>\$346,500</u>

CERTIFICATION

Please read before signing.

I certify under penalty of perjury that the information I have entered on this application is true and complete to the best of my knowledge and that I am entitled to submit the application on behalf of the applicant (if the applicant is an entity/organization). I further understand that any false, incomplete, or incorrect statements may result in the disqualification of this application. By signing this application, I waive any and all rights to privacy and confidentiality of the proposal on behalf of the applicant, to the extent provided in this RFP.

	June 6, 2002
_____ Applicant Signature	_____ Date

Ed Romano
_____ Printed Name of Applicant

PART B – PROJECT NARRATIVE

SURFACE WATER STEWARDSHIP PROJECT

Proposal Summary

Through efforts involving local growers, governmental agencies, and other organizations, the Glenn County Surface Water Stewardship Project will address the following issue in the County of Glenn:

Nonpoint source pollution associated with runoff from orchards. Sources of concern are pesticides, sediment, and nutrients. Without mitigation these sources have the potential to impair waterways such as the Sacramento Watershed and Bay-Delta system.

The funding we are requesting through the CALFED Watershed Program will be used to continue with and build upon existing outreach, education, research, and water quality management programs that have been instrumental in advancing our Glenn County Surface Water Stewardship Project.

At the end of the grant period, it is expected that practicable means for farmers to control or mitigate off-site pollution will be demonstrated and data gaps in research provided. In order to better inform growers, the program will utilize field days, farms tours, newsletters, and the media. As an active participant to the Sacramento River Watershed Program, information and data will be shared and exchanged with other regional stakeholders, and participants, such as the Regional Water Control Board, Department of Pesticide Regulations, CALFED Bay-Delta Program, and other interested individuals.

The Glenn County Surface Water Stewardship Project not only actively seeks to share knowledge and information, but is committed to developing partnerships (see letter submitted in Part H) and through these partnerships strive to achieve in promoting an effective program that promotes management actions that address water quality issues.

INTRODUCTION OF THE ORGANIZATION

In 1996 the Glenn County Agricultural Commissioner's Office instituted a series of public meetings to bring awareness to the landowners of Glenn County about the issues of water quality and detection of organophosphate (OP) pesticides in the Sacramento River. From this initial start, a group of orchard landowners, Pest Control Advisors (PCA's), and representatives from The University of California Cooperative Extension (UCCE), Natural Resources Conservation Service (NRCS), Glenn County Agricultural Department, and others formed the Glenn County Surface Water Stewardship Committee (GCSWSC). As an advisory committee, this collaborative team reviews and provides technical oversight to the program.

The lead agency for this program is the Glenn County Department of Agriculture. County Agricultural Departments are the local enforcement agents for the California Department of Food

and Agriculture and the California Department of Pesticide Regulation. These Departments manage programs and agricultural enforcement activities at the county level. Chief among these duties is public safety and protection of agriculture, consumers, and the environment. As lead agency the Glenn County Agricultural Department has managed and administered previous grant funds, which include two Great Valley Center – LEGACI Grants, and through the Glenn County Resources Planning and Development Department the Glenn County Agricultural Department has managed a 205J Grant and currently is administering and managing a 204 Grant. The Glenn County Agricultural Department has been an active participant to the Sacramento River Watershed Program since 1994 and since 1997 as lead agency has represented both Glenn County and the Glenn County Surface Water Stewardship Program.

The agency responsible for site monitoring coordination is the California State University in Chico. CSU Chico's College of Agriculture and the Geosciences are both actively involved in the management of the demonstration sites. The mission of the College of Agriculture is to create, share, and disseminate knowledge of integrated agricultural and environmental systems to students, industry, and society. The Geoscience Department strives to introduce students to the knowledge, the concepts and the understanding of the physical universe through the disciplines of geology, astronomy, meteorology, hydrology, and environmental science.

The project has successfully assembled a multidisciplinary team. Active collaborators include the University of California-Cooperative Extension and the USDA-Natural Resources and Conservation Service. The Cooperative Extension service mandate is a land-grant institution that ties them to the welfare, development and protection of the state's land, resources, and people. Their mission is to develop and extend the use of research-based knowledge to improve specific practices and technologies. The Natural Resource Conservation Service provides leadership in a partnership effort to help people conserve, maintain, and improve our natural resources and environment. To round off the committee, industry is represented by growers and Pest Control Advisors.

The Glenn County Surface Water Stewardship Project has made many accomplishments since being formed in 1997. Currently the project has successfully conducted or sponsored twelve workshops or farm tours, developed a three part technical guide on cover crops, conducted/sponsored a water infiltration study, developed and established demonstration/study sites, and, through the Sacramento River Watershed Program, a grower manual was developed and distributed.

Problem Statement

Until recently, the Glenn County Surface Water Stewardship Program focused most of its efforts on organophosphates (OP) pesticides. Organophosphate pesticides, such as diazinon, chlorpyrifos, methidathion, and malathion, are of particular concern in the Central Valley because of the number of applications to dormant orchards. This "dormant spraying" controls a number of insect pests and typically occurs from December through February. In Glenn County there are approximately 52,000 acres of bearing orchards and vineyards with over 36,000 acres having the potential of being dormant sprayed, with diazinon being the primary choice of pesticides used for dormant applications. Winter storm events that follow these dormant applied pesticides can wash

the recently applied chemicals into surface waters in concentrations toxic to sensitive invertebrates. This runoff, or nonpoint source pollution, is of major concern. Nonpoint source pollution is considered the State's most significant source of water pollution.

Monitoring by multiple agencies has demonstrated that storm-water runoff from orchards can result in elevated concentrations of OP pesticides in surface waters (deVlaming et al., 1999). Monitoring conducted by the Central Valley Regional Water Quality Control Board (CVRWQCB), Department of Pesticide Regulation (DPR), U.S. Geological Survey and the Sacramento River Watershed Program (SRWP) have found that some dormant spray levels were high enough to cause aquatic toxicity caused by Organophosphates (OP) pesticides, principally diazinon. Monitoring data demonstrates the Sacramento River receives sufficient diazinon loads to result in diazinon concentrations that exceed water quality standards. Being a primary contributor to the Bay Delta, it is surmised that diazinon loads in the Sacramento River result in concentrations in the Bay Delta to be toxic to the standard toxicity test organism, *Ceriodaphnia dubia*. These test organisms are exposed to water samples and their responses are compared to those of control organisms exposed to control water. A sample is considered toxic if it results in an adverse response that differs significantly from the response of control organisms.

There is speculation that the decline in zoo plankton, cladoceran and benthic invertebrate populations over the last several decades in the San Francisco Estuary, Delta and Sacramento-San Joaquin Basins may be related to the increase of pesticides in surface waters (Obreloski, et al., 1992; San Francisco Estuary Project, 1997; Cooke et al., 1999). Invertebrate communities are necessary food items for nearly all of the priority fish populations in the Sacramento-San Joaquin Basins during their early life stages (Eldridge et al., 1982; Schaffter et al., 1982; Brown, 1992; Moyle et al., 1992; Meng and Moyle, 1996; Lott, 1998; Nobriga, 1998). Dormant season spraying coincides with the time when these fish (including Delta smelt, Chinook salmon, longfin smelt, splittail, steelhead trout, and green sturgeon) are in their early life stages (Cooke et al., 1999). The effects of pesticide-caused toxicity to aquatic communities are likely to be greater in first order streams near the point where storm-water and irrigation runoff enters tributary waters that can be important nursery grounds for anadromous as well as resident fish species.

Agricultural activities are a major source of water pollution. Because of their pervasive influence on water quality, nitrates, phosphorus, and sediment are also issues of concern.

Agriculture produces vast quantities of feed and fiber for the ever-growing world population. While our society enjoys a rich diversity of produce and food products, consumers are also very concerned about how that food and fiber is produced. Indeed, air and water quality issues have been at the fore-front of major legislative measures, including the Connelly-Areias-Chandler Rice Straw Burning Reduction Act of 1991 and the Nonpoint Source Water Pollution Control measures proposed by the Environmental Protection Agency.

Methods to handle crop residues and waste products present a unique challenge from an ecological, as well as, economical perspective. The burning of rice straw prevented the spread of stem rot and rice blast into the next season, enhanced soil fertility and was extremely economical. However, increases in particulate matter (smoke and ash) in the air created serious problems between rural farmers and urban residents of neighboring cities and towns. Since the enactment of

the Phase-down Act, producers have experimented with other methods of handling rice straw removal including baling, which removes the soil nutrients, and direct soil incorporation that, unfortunately, promotes disease and may actually damage the soil profile due to poor breakdown of straw residue.

Equally difficult is the issue of livestock waste management. Current methods designed to prevent groundwater contamination are very costly, preventing many small family farmers from compliance based on economic factors alone. Cost effective management strategies that promote sustainability are clearly needed or small family farmers will be forced out of production based on the inability to comply with regulatory requirements.

Project Objectives

The Glenn County Surface Water Stewardship Programs will strive to continue with existing and established efforts that have been invested in the County of Glenn. By developing a pesticide/water quality management education program that utilizes field days, farms tours, newsletters, and the media, grower awareness and environmental education has been raised.

The project has established demonstration orchards as a means to provide essential information to landowners on Best Management Practices that are capable of reducing nonpoint source pollution associated with runoff after winter storm events. This project has served as an augmentation to existing efforts within Glenn County. Project cooperation between the Glenn County Surface Water Stewardship Program, UCIPM, CALFED Grant Implementation of Best Management Practices, NRCS EQIP Program, SRWP and others have elevated the project's efforts and through information exchange has raised regional awareness, education and knowledge.

Data collected from the monitoring network will aid in answering questions on Best Management Practices and the efficacy of those practices. The project will accomplish multiple objectives including, but not limited to, the following:

- A. Water Quality Management Program
 - a. To educate and publicize information in Glenn County about management strategies, pesticide application methods and on-site practices that can minimize runoff, thereby improving ecosystem quality and water quality.
 - b. Continue maintaining two horizontal and buffer strip demonstration sites that serve as working models that provide information useful for growers in mitigating agricultural chemical runoff from orchards.
 - c. Continue maintaining a cover crop demonstration site that shows a means in which off-site of nonpoint source pollution is reduced.
 - d. Develop a demonstration site that will examine the feasibility of utilizing rice straw compost as a management strategy in the effort to address water quality issues. Pesticides can be highly absorptive to organic matter (Petrovic et al., 1998, Wilson

& Foy, 1992). Therefore, large amounts of organic matter may significantly attenuate the movement of pesticides in runoff from the field into surface water. Most soils in California are generally uniformly low in organic matter content.

- e. Provide on-site water quality monitoring of demonstration sites to assess the effectiveness of management measures that may reduce or limit the off-site movement of pesticides, fertilizers, and soil into the surface or groundwater.
- f. Provide data that will be used to measure and quantify atmospheric deposition (drift). Atmospheric deposition of pesticides on soil and water surfaces will be assessed in a reconnaissance study that addresses both the local application and ambient regional sources. Methods and procedures will conform to those employed by both the Department of Pesticide Regulation and US Environmental Protection Agency. Additional soil surface deposition sampling protocols being developed by the US Geological Survey will also be evaluated at the site. A wet/dry collector system will also be installed following protocols of the National Atmospheric Deposition Program.
- g. Develop a GIS/Arcview database system that will be utilized in reviewing critical environmental areas. Critical areas within a watershed have the greatest impact.

PART C – PROPOSED SCOPE OF WORK

1. Background and Goals

Grower education and outreach activities will be ongoing during the project. Educational programs will be designed to aggressively promote the awareness of water quality issues in the Sacramento River Watershed and its tributaries. Methods utilizing a series of field days, grower workshops, and newsletters will inform growers in Glenn County. The projected outcome of the educational program is to provide growers with the knowledge that will enable and empower them to effectively recognize and mitigate (through the implementation of best management measures) water quality issues associated with orchard runoff.

It is anticipated that sufficient adoption of Best Management Practices will result in improved surface water quality. Before widespread or meaningful change can be achieved, programs demonstrating effective and attainable management measures will need to be demonstrated or proven. It is also anticipated that multiple years of continuous demonstration effort is required before a practice is changed or adopted.

An objective of the project is to establish and implement demonstration sites for the purpose of education and study. Model riparian buffer sites have been established to evaluate the effectiveness of Best Management Practices for the control of pesticides and nutrients from orchards. Three treatments have been established: 1) bare ground, 2) resident vegetation, and 3) established vegetation (native perennial grasses). The riparian buffer sites will also provide data to parameterize and validate the USDA – Riparian Ecosystem Management Model (REMM). The demonstration of a cover crop site will also be utilized to demonstrate ways to reduce off-site runoff of nonpoint source pollution.

This proposed project will initiate and develop a pilot study to examine the feasibility of using agricultural waste products (rice straw compost) as an alternative in a management strategy in an effort to address water quality issues. Within the past few years, research has indicated that the use of mature compost provides an inexpensive and technologically straightforward solution for managing and for remediating soil exposed to organic compounds such as pesticides. A possible outcome of this pilot study would demonstrate the possible practicable innovative use of rice straw compost in the management on nonpoint source pollution. The utilization of rice straw for compost could have a far reaching impact in Glenn County that would affect the economic, as well as air quality and water quality issues.

In recent years, technological advances have changed the way geographic analyses are done. Increasingly, computers are used to automate aspects of cartography and remote sensing producing data that are easily integrated into a GIS.

Many GIS systems have the capability of incorporating aerial photography, satellite data and radar imagery into their data layers.

Because most GIS systems can correct for radial distortion, aerial photographs are an excellent data source for many types of projects, especially those that require spatial data. Typical applications include land use surveys and habitat analysis. Developing and utilizing a GIS system would be instrumental in identifying critical high-risk farm areas.

Further funding of this project will ensure that a valuable source of data and an important educational tool will continue to be promoted.

2. Proposed Work to Be Performed

Task 4 Pesticide/Water Quality Management Program

4.1 Prepare and maintain demonstration sites by securing written landowner agreements.

Pesticide management through the use of Best Management Practices will be implemented through field demonstrations for almond and stone fruit (plums, peaches) orchards. At these demonstration sites, trials of different methods will serve as working models that provide information useful to growers in controlling nonpoint source pollution associated with orchard runoff.

The program will highlight management practices that reduce or prevent pesticides, nutrients, and sediment from entering the watershed.

- a. Establish three sites that utilize and compare different types of cover crops and vegetative buffer or filter strips. These sites will be approximately five acres in size each. Each site will include actions, such as land preparation, herbicide use, fertilization, seed sowing, and irrigation of the site to establish and maintain it. Each site will have a comparison area for a “control” or “standard” and will be studied for a minimum of three (3) years. At each site photo documentation will be provided with appropriate data (date, location, phase of projects, etc.). The three sites will be located as follows: Lassen Land Co. #1, Lassen Land Co. #2, and Talbot-Vereschagin Ranch.
- b. Maintain, at Lassen Land Co. #1 and Lassen Land Co. #2, a vegetative buffer or filter strips of vegetation on the perimeter of the orchard to demonstrate ways in which to reduce off-site run-off of pesticides, nutrients, and sediment. Sampling of surface and shallow subsurface concentrations of diazinon, nitrates, and phosphorus will be taken at these two sites to determine the effectiveness of the vegetative buffer or filter strips.
- c. Maintain, at the Talbot-Vereschagin Ranch site, a cover crop demonstration site to demonstrate ways to reduce off-site runoff of nonpoint source pollution. No water quality monitoring will be done at this site under this program; however, other research organizations may use the site for water quality monitoring. UCIPM has utilized this site for run-off monitoring studies administered in the 99-00 and 00-01

dormant spray seasons. UCIPM has expressed an interest in returning to this site to conduct further studies.

- d. Develop a demonstration site that utilizes rice straw compost. Compost has been found to remediate soil exposed to chemical compounds such as pesticides.

4.2 Monitoring and sampling of sites established at Lassen Land Co. #1 and Lassen Land Co. #2.

A chemical monitoring and reporting plan will be submitted to CALFED for approval. A Quality Assurance Project Plan (QAPP) for chemical monitoring will be prepared in accordance with the USCPA Quality Assurance Project Plans, EPA AQ/R5, 3/01. The QAPP shall be approved by CALFED prior to the implementation of any sampling or monitoring activities. A monitoring and reporting plan was similarly prepared for obtaining baseline-monitoring data for the SWRCB 204 contract.

Chemical analysis of samples from demonstration sites would provide data as to the effectiveness of the sites. Monitoring the effectiveness of individual Best Management Practices is important in the evaluation of controlling nonpoint source pollution.

Sampling of off-site surface and subsurface water gradient samples will occur at two demonstration sites (Lassen Land Co. #1 and #2). A grid of piezometers will be installed at depths representative of the root zone. A grid of surface collectors will also be installed.

In addition to control samples being collected, monitoring of water gradient samples will occur at the collection sites a minimum of five different sampling dates. Dates and times of sampling would be dictated by weather conditions. Results of monitoring analysis will be provided to the Contract Manager from each sampling date.

4.3 Sampling of atmospheric deposition will occur after diazinon applications. Absorbent fall-out sheets, composed of glass-fiber cards will be installed approximately 5 cm above ground to sample deposition. Sampling transects across each buffer strip treatments will be established with collection points above the plot and within the plot and below the plot. Six replicate transects will be installed at each of the treatment plots and samples will be composited for each of the three collection positions. A corresponding number of soil samples will also be collected to a depth of 2.54 cm and analyzed for diazinon. Monthly sampling will also take place during the first year to assess regional atmospheric deposition from off-site sources. Depending on the first-year results, the time interval between samples may be increased or decreased. Accurately characterizing and quantifying off-site atmospheric deposition (drift) from pesticides is a major outcome of this study. Sampling and monitoring of atmospheric deposition will occur at Lassen Land Co. #1 demonstration site.

4.4 To promote Best Management Practices, the Glenn County Surface Water Stewardship Program will use field days, grower workshops and newsletters for adult education.

- a. Hold one field day per year at demonstration sites. The demonstration sites will be shown to farmers, landowners, and educators at these field days.
- b. Hold one grower workshop per year to further promote Best Management Practices.
- c. Develop and distribute two newsletters per year to provide information to growers regarding watershed activities.

Task Products: Landowner agreements, quality assurance plan, photo documentation, notice of field days and workshops, newsletters.

- 5. Obtain and organize watershed data in GIS database system.
 - a. Maps
- 5.1 Set up spatial databases for all identified orchards in Glenn County.
- 5.2 Develop a GIS database management system to and maintain the base data related to watersheds. Add new data to the system. Information detailed in the GIS maps will include: parcel boundaries and size; ownership; and land use. The maps will be able to accurately identify critical environmental areas.

Task Products: Spatial information, GIS data management system, maps.

PART C (Continued)

3. TARGET COMPLETION DATES

Task No. Deliverables	Target Completion Dates
Task 1: Project Administration	
1.2 Quarterly/Monthly Progress Reports	09/30/03 and quarterly thereafter through the life of the contract
1.5 Contract Summary Form	09/30/03
1.6 List of subcontracted tasks, Good Faith Effort documents, quarterly/monthly Utilization Reports	09/30/03
1.7 Subcontractor Documentation	08/31/03
1.8 Expenditure/Invoice Projections	12/31/03 and every six months thereafter through the life of the contract
1.9 Project Survey Form	05/01/06
Task 2: CEQA/NEPA Documents and Permits, if applicable	
2.1 CEQA/NEPA Documentation	Continuous
2.2 Permits	Continuous
Task 3: Quality Assurance Project Plan, if applicable	<i>SAP/QAPP</i> 11/30/03
Task 4: Pesticide/Water Quality Management Program:	
4.1 Demonstration Sites	09/01/03
4.2 Monitoring	Continuous
4.3 Sampling	Continuous
4.4 Best Management Practices:	
a.	05/04; 05/05; 05/06
b.	12/03; 12/04; 12/05
c.	12/03; 05/04; 12/04; 05/05; 12/05; 05/06
Task 5: GIS	Continuous
Task #: Draft and Final Reports	
#.1 Draft Report	05/01/06
#.2 Final Report	06/30/06

PART D1 - BUDGET SUMMARY SHEET – TASK BUDGET BREAKDOWN (PARTS D1 AND D2 COMBINED NOT TO EXCEED 2 PAGES)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Task 1 – Project Administration	<u>\$ 32,000</u>	<u>\$ 10,000</u>	<u>\$42,000</u>
2. Task 2 – CEQA/NEPA Documents and Permits	<u>1,000</u>	<u>1,000</u>	<u>2,000</u>
3. Task 3 – Quality Assurance Project Plan	<u>1,500</u>	<u>1,000</u>	<u>2,500</u>
4. Task # – 4	<u>200,500</u>	<u>58,500</u>	<u>259,000</u>
5. Task # – 5 GIS	<u>35,000</u>	<u></u>	<u>35,000</u>
6. Task # –	<u></u>	<u></u>	<u></u>
7. Task # –	<u></u>	<u></u>	<u></u>
8. Task # -- Draft and Final Reports	<u>5,000</u>	<u>1,000</u>	<u>6,000</u>
TOTAL BUDGET	<u>275,000</u>	<u>71,500</u>	<u>346,500</u>

PART D2 - BUDGET SUMMARY SHEET – LINE ITEM Budget (Parts D1 and D2 combined not to exceed 2 pages)

	Proposition 13 Funds	Other Project Funds	Total Budget
1. Personnel Services	<u>\$65,000</u>	<u>\$12,500</u>	<u>\$77,500</u>
2. Operating Expenses	<u>20,000</u>	<u>500</u>	<u>20,500</u>
3. Property Acquisitions			
a. Equipment	<u>50,000</u>	<u></u>	<u>50,000</u>
b. Furniture	<u></u>	<u></u>	<u></u>
c. Portable assets	<u></u>	<u></u>	<u></u>
d. Electronic data software/hardware	<u>10,000</u>	<u></u>	<u>10,000</u>
e. Processing equipment	<u></u>	<u></u>	<u></u>
f. Miscellaneous	<u></u>	<u></u>	<u></u>
4. Professional and Consultant Services	<u>110,000</u>	<u>58,500</u>	<u>168,500</u>
5. Contract Laboratory Services	<u></u>	<u></u>	<u></u>
6. Construction Expenses	<u></u>	<u></u>	<u></u>
7. General Overhead	<u>20,000</u>	<u></u>	<u>20,000</u>
8. TOTAL BUDGET	<u>275,000</u>	<u>71,500</u>	<u>346,500</u>

9. Describe the source and nature of the matching funds.

- Glenn County Agricultural Dept. – Director time, mileage, personnel, in-kind services
- Glenn County Cooperative Ext. Services – Education, outreach, in-kind services
- CSU Chico – Cost share contribution, in-kind services, monitoring, technical expertise
- Private Landowners – Cost share contribution, in-kind services
- Stanley Green Farms – Cost share contribution

NOTES:

- 1) Personnel Services: (Including fringe benefits @ 32%)
 1. Agriculture Commissioner @ 66.46 per hour
 2. Assistant Agriculture Commissioner @ 50.46 per hour
 3. Deputy Agriculture Commissioner @ 49.09 per hour
 4. Senior Agriculture Biologist @ 32.45per hour
 5. Office Manager @ 30.81 per hour
- 2) Operation Exp.: Includes photocopies, telephone, office supplies, travel, rent, field supplies, equipment rental.
- 3) Property Acquisition (Equipment): Two weather stations, camera, Arcview (map object license), plotter/printer, wet/dry collector system, GPS unit, field test kits, glass-fiber cards.
- 4) {Property Acquisition (Electronic data)}: Five computers, software, networking, aerial imagery.

PART E – PROJECT MAP

(SEE FOLLOWING MAP)

PART F – ENVIRONMENTAL INFORMATION FORM (3 pages maximum)

ENVIRONMENTAL INFORMATION FORM

NEPA/CEQA

1. Will this project require compliance with CEQA, NEPA, or both? Yes _____ No X _____
2. If you checked “no” to question 1, please explain why compliance is not required for the actions in this proposal.

This is an ongoing project that involves normal farming actions in a controlled environment. Activity requiring CEQA documents are not anticipated.

3. If the project will require CEQA and/or NEPA compliance, identify the lead agency(ies).

CEQA Lead

Agency N/A

NEPA Lead

Agency N/A

4. Please check which type of document will be prepared.

CEQA

Categorical Exemption _____
Initial Study _____
Environmental Impact _____
Report _____

NEPA

Categorical Exclusion _____
Environmental Assessment/FONSI _____
Environment Impact Statement _____

If you anticipate relying on either or both the Categorical Exemption or Categorical Exclusion for this project, please specifically identify the exemption and/or exclusion that covers this project. (Example: Fish and Wildlife Service Manual at 516 DM 6 Appendix 1.4 Categorical Exclusions Section B Resources Management: (1) Research, inventory, and information collection activities directly related to the conservation of fish and wildlife resources.)

5. If the CEQA/NEPA process is not complete, please describe the estimated timelines and cost for the process and the expected date of completion. N/A
6. If the CEQA/NEPA document has been completed:

What is the name of the document? N/A

Please attach a copy of the CEQA/NEPA document cover page to the application.

APPLICATION FORM
Glenn County Department of Agriculture
Application #419

Please indicate what permits or other approvals may be required for the activities contained in your proposal and which have already been obtained. Please check all that apply.

LOCAL PERMITS AND APPROVALS	Needed?	Obtained?
Conditional use permit	NO	
Variance	NO	
Subdivision Map Act	NO	
Grading permit	NO	
General plan or Local Coastal Program amendment	NO	
Specific plan approval	NO	
Rezone	NO	
Williamson Act Contract cancellation	NO	
Local Coastal Development Permit	NO	
Other	NO	
STATE PERMITS AND APPROVALS	Needed?	Obtained?
Scientific collecting permit	NO	
CESA compliance: 2081	NO	
CESA compliance: NCCP	NO	
1601/03	NO	
CWA 401 certification	NO	
Coastal development permit	NO	
Reclamation Board approval	NO	
Notification of DPC or BCDC	NO	
Other	NO	
FEDERAL PERMITS AND APPROVALS	Needed?	Obtained?
ESA compliance Section 7 consultation	NO	
ESA compliance Section 10 permit	NO	
Rivers and Harbors Act	NO	
CWA 404	NO	

APPLICATION FORM
Glenn County Department of Agriculture
Application #419

Other	NO	
PERMISSION TO ACCESS PROPERTY		
Permission to access city, county or other local agency land. If “yes,” indicate the name of the agency: _____	NO	
Permission to access State land. If “yes,” indicate the name of the agency: _____	NO	
Permission to access federal land. If “yes,” indicate the name of the agency: _____	NO	
Permission to access private land. If “yes,” indicate the name of the landowner (if multiple landowners, indicate how many individuals will be involved and what percentage have already granted permission: Lassen Land Co. and Talbot-Vereschagin	YES	

PART G – LAND USE QUESTIONNAIRE (2 pages maximum)

PART - LAND USE QUESTIONNAIRE

1. Do the actions in the proposal involve construction or physical changes in the land use? Yes _____ No X_____

If you answered “yes” to # 1, describe what actions will occur on the land involved in the proposal.

If you answered “no” to # 1, explain what type of actions are involved in the proposal (i.e., research only, planning only). Implementation of Best Management Practices that will mitigate off-site nonpoint source pollution.

2. How many acres of land will be subject to a land use change under the proposal?
_____ -0- _____

3. What is the current land use of the area subject to a land use change under the proposal? What is the current zoning and general plan designation(s) for the property? Does the current land use involve agricultural production?

- a) Current land use Agricultural _____
b) Current zoning Agricultural _____
c) Current general plan designation Agricultural _____
d) Does current use involve agricultural production? Yes X_____ No _____

4. Is the land subject to a land use change in the proposal currently under a Williamson Act contract?
Yes _____ No X_____

5. What is the proposed land use of the area subject to a land use change under the proposal? N/A No change in land use.

6. Will the applicant acquire any land under the proposal, either in fee (purchase) or through a conservation easement? Yes _____ No X_____

- a) If you answered “yes” to 6, describe the number of acres that will be acquired and whether the acquisition will be of fee title or a conservation easement:
b) Total number of acres to be acquired under proposal
c) Number of acres to be acquired in fee

d) Number of acres to be subject to conservation easement

7. For all lands subject to a land use change under the proposal, describe what entity or organization will manage the property and provide operations and maintenance services. N/A No change in land use
8. Will the applicant require access across public or private property that the applicant does not own to accomplish the activities in the proposal? Yes X No _____
9. For land acquisitions (fee title or easements), will existing water rights be acquired? Yes _____ No _____ N/A
10. Does the applicant propose any modifications to the water right or change in the delivery of the water? Yes _____ No X

If “yes” to 10, please describe the modifications or changes.

PART H – SUPPORTING DOCUMENTATION

(See attached supporting documentation.)